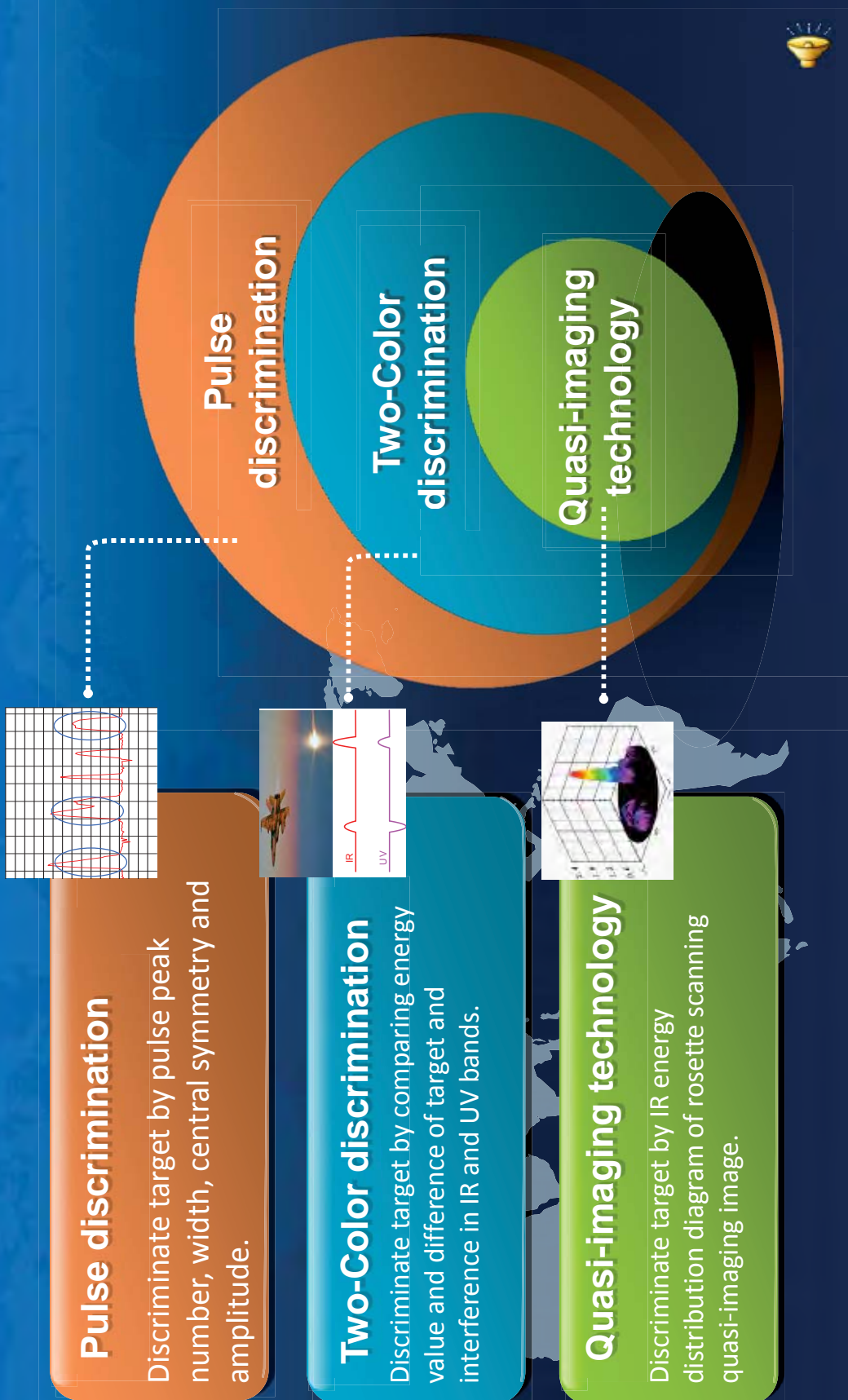


# Main anti-jamming technologies

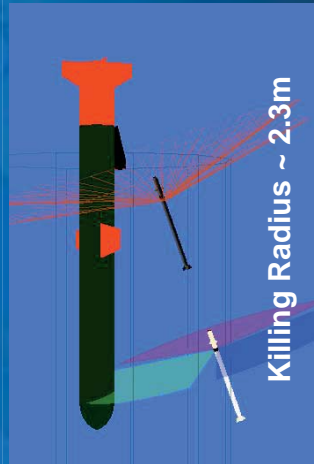


# Fuze-Warhead section



## Fuze

missile adopts Laser proximity / impact combination fuze. The laser proximity fuze has three transmitting channels and three receiving channels.



## Fuze-warhead coordination

Fuze-warhead coordination parameters are preset (target type is selected by the firer and the delay time of fuze is automatically calculated by the missile), which improves the kill probability against small targets such as cruise missiles and UAVs.



## Warhead

Warhead adopts focusing and small dispersing angle fragment design to improve target hit probability and fragment density. The killing radius is more than 2m.



# Motor

Motor is composed of sustainer motor and booster motor.

Booster motor remains in launch tube after burning out to improve firing safety.

Motor is featured by high performance, high reliability and long lifetime characteristics.



## Launch tube, Firing Unit & Ground Energy Unit



**Launch Tube** is the general frame of structural assembly of missile weapon system.



**Firing Unit** is the control center of missile weapon system. It's featured by full digitized design, intelligent, programmable firing process.



**Ground Energy Unit** is composed of thermal battery and high pressure gas cylinder. It supplies energy to missile system prior to firing for not less than 60 s.



# Summary

Black Star is the new generation MANPAD missile weapon system independently developed by our factory with its own patent technology and intellectual property. Featured by high performance, easy operation and maintenance and high reliability, this system can meet the requirements of future combat environment.



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BY \_\_\_\_\_  
DEPUTY CLERK

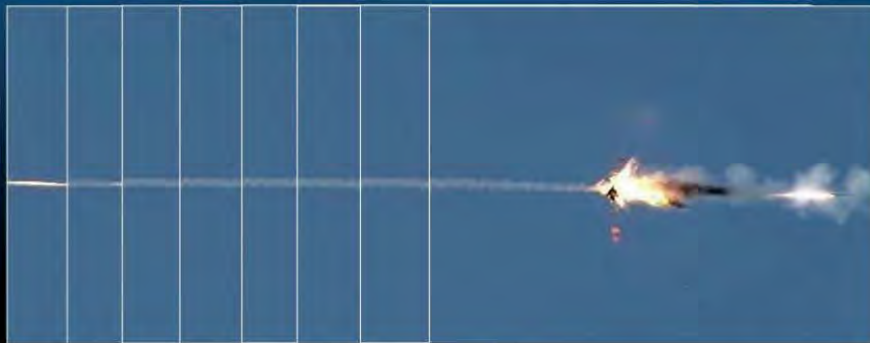
AO 386



Black Star 201...



## Black Star MANPAD Missile Weapon System



### General Introduction



Black Star, a new generation MANPAD missile weapon system developed for future combat, is designed to engage various ultra-low and low altitude targets. It has a broad aspect attack, anti-infrared decoy and "fire and forget" abilities.

Your text here

### Characteristics of Black Star missile

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DATE \_\_\_\_\_ IDEN.

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DEPUTY CLERK

AO 386

**From:** Alexei Alexei <office.hartford@gmail.com>  
**Sent:** Thursday, October 1, 2015 3:16 AM  
**To:** Rami Ghanem <ramithe@gmail.com>  
**Subject:** Question  
**Attach:** cert\_20of\_20registration\_20ipc.pdf; KyrgEndUser.pdf

---



Republic of Lebanon

الجمهورية اللبنانية

Number /1804666/

عدد /18.٤٦٦٦/

Certificate of Registration of a  
Commercial Company

## شهادة تسجيل شركة تجارية

The president of the First Jurisdiction  
Court in Beirut (commercial Register)  
certify that the Commercial Company  
know us:

إن رئيس قلم محكمة الدرجة الأولى  
المدنية في بيروت (السجل التجاري)  
يثبت أن الشركة التجارية المعروفة  
باسم:

Integrated Projects  
Company S.A.L.شركة  
Integrated Projects  
Company S.A.L.

Had been registered on ٤-١٥-٢٠١٥ in the  
Special Commercial Register under no.  
/1804666/ CR, according to  
articles 26, 48 and 49 of the Commercial  
Code and the Legislative Decree No  
46/83.

٩ - تم تسجيله في ١٥-٠٤-٢٠١٥ في السجل  
قد تقيدت بتاريخ  
التجاري المخصص تحت رقم /18.٤٦٦٦/  
س.ت. وفقاً للمادة ٢٦ معطوفة على  
المادتين ٤٨ و ٤٩ من قانون التجارة  
والمرسوم الاشتراعي رقم ٨٣/٤٦.

Hereupon, this certificate was given  
upon the request of Mr. Hussein  
Hassan Fawaz.

وعليه قد أعطيت هذه الشهادة بناءً لطلب  
السيد حسين حسن فواز ليعمل بها حسب  
المقتضى القانوني.

Seen

نظر

Beirut on

بيروت في



**Ministry of Defense**  
Military Procurement Dept.



**وزارة الدفاع**  
إدارة المشتريات العسكرية

Date : 15.06.2015 التاريخ :

Reference: Kyrg-2/15-2015 الرقم الاشاري :

**END USER CERTIFICATE NO:- Kyrg-2/15-2015**

1- End -user's full name and address: LIBYAN ARMY - MINISTRY OF DEFENSE  
TRIPOLI - LIBYA

2- Exporter's full name address : State Enterprise kyrgyzkural  
Kozhegulov Bekbolot Orozbekovich

3- Name and full description of the goods :

No.	Name of the goods	Quantity, Pcs
1	7.62 MM Assault Rifle with Folding Butt	1,000
2	Ammunition for 7.62 mm Rifle	1,000,000
3	7.62 mm Machinegun PKC	1,000
4	Ammunition for 7.62 mm Machine gun PKC	1,000,000
5	60 MM, M60 Mortar	100
6	60 MM Shells (Extended Range - 3000 Meter)	1,000
7	82 MM mod. 37 Mortar	100
8	Shells for 82 MM Mortar (Extended Range - 5400 Meter)	1,000
9	RPG-7 Thermal Basic Projectile	10,000
10	RPG-7 Launching Tube	500
11	RPG-7 Optical Sight	500
12	Laser Beam Guided anti-Tank in Launching tube	40
13	Laser Beam Guided anti-Tank Rocket Launcher	400
14	Laser Beam Guided Anti-Tank Rocket Checking Device	10
15	7.62 MM Special Sniper Rifle	500
16	Ammo for Sniper Rifle	1,000,000
17	40 MM Grenade Launcher System	500
18	40 mm Grenade (VOG-30-VOG-M17)	60,000
19	9 MM Automatic Machine Gun (90 Bullets)	500
20	9 MM Automatic Machine Gun (50 Bullets)	500
21	9 MM ammunition	1,000,000
22	Igla-E (SA-18M) Missile (or equivalent)	500
23	Igla-E (SA-18M) Launcher (or equivalent)	125

**Ministry of Defense**  
Military Procurement Dept.



**وزارة الدفاع**  
إدارة المشتريات العسكرية

Date : 15.06.2015 التاريخ :

Reference: Kyrg-2/15-2015 الرقم الاشاري :

**END USER CERTIFICATE NO:-** Kyrg-2/15-2015

No.	Name of the goods	Quantity, Pcs
24	7.62 MM 6 Barrel Machine Gun	16,000
25	122 MM Grad Rocket for 21 KM	10,000
26	122 MM Grad Rocket for 41 KM	15,000
27	107 MM Rocket	20
28	30 MM 4 Barrel Gun MA-4	20
29	30 MMAmmunition for 4 Barrel Gun	20
30	Ammunition for 6 Barrel Gun 7.62*39	1,000,000
31	Ammunition for 6 Barrel Gun 7.62*54	1,000,000
32	DSHK-M Machine Gun (12.7)	100
33	Ammunition for DSHK - 12.7 MM	500,000
34	Ammunition for DSHK - 12.7 MM	500,000
35	Konkurs Anti Tank Launcher /9P135M	20
36	Konkur anti-Tank Missiles /9M113	300
37	Zu-23 MM Gun	180
38	Zu-23 MM Gun Mmunition - Type (APIT) (Stoke)	260,000
39	Zu-23 MM Gun Ammunition- Type Heat (New)	50,000
40	14.5 MM Gun 1 Barrel	20
41	14.5 MM Gun 2 Barrel	20
42	Ammunition 14.5 MM type B-32	200,000
43	Ammunition 14.5 MM B71	200,000
44	Ammunition 14.5 MM type MDZ	100,000
45	155 MM shells	2,000
46	32 MM ammunition	200,000

**Ministry of Defense**  
**Military Procurement Dept.**



**وزارة الدفاع**  
**إدارة المشتريات العسكرية**

Date : 15.06.2015 التاريخ :

Reference: Kyrg-2/15-2015 الرقم الاستشاري :

**END USER CERTIFICATE NO:- Kyrg-2/15-2015**

**Certification by Consignee:**

We certify the equipment detailed above will be delivered to the nominated end-user only. Except with the express prior written authorisation of the Government of Libya we will not re-export, re-sell or otherwise dispose of the equipment or any part of the equipment to any person other than the nominated end-user. We further certify that all the facts contained in this certificate are true to the best of our knowledge and belief.

Signed:

Date: 15.06.2015

Seal:



**Certification by Consignor/Intermediate:**

Signed:

Date:

Name:

Seal:

Designation:

Organization:

Signed:

Designation: GENERAL DIRECTOR

Name: Hussein H. FAWAZ

C/O : INTEGRATED PROJECTS COMPANY

Seal:



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UNITED STATES OF AMERICA

VS. GHANEM

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DATE \_\_\_\_\_ IDEN.

DATE \_\_\_\_\_ EVID.

BY \_\_\_\_\_

DEPUTY CLERK

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التاريخ  
Date  
الموافق  
2015 10/107  
الرقم الإشاري  
0054/57  
Ref. Number



رئاسة مجلس الوزراء

ديوان الوزارة

## Ministry of Defense END USER CERTIFICATE

### TO WHOM IT MAY CONCERN

This is to certify that following products for the needs of the Armed Forces of Libya, will be purchased from following supplier :

- Country of final destination Republic: of LIBYA.
- Home, address of the end user : Ministry of Defense of Republic of Libya, Tripoli – Libya
- Exporter: State Enterprise Specialized Trade Firm PROGRESS.
- 2/10 Melnikova Str. Pavilion 14, Kyiv, 04050 Ukraine.
- Importer: Ministry of Defense of Republic of Libya (or any appointed company)
- Contractor: Gateway to MENA for logistic Services Amman, Jordan 11183.

No.	Description	Quantity (pcs.)
1.	Ammunition 23 mm for AA Gun ZU-23.	1.600.000
2.	Ammunition 14,5 mm for AA Gun round.	1.300.000
3.	Mortar Rounds 120.	12,000
4.	Grad 122 mm Rocket.	10,000
5.	Ammunition 7,62x54 mm(120cm) for machinegun PKT round linked.	5.000.000
6.	Anti – Tank Launcher GP 135 ML.	50
7.	Rocket 9 M111M Fagot.	150
8.	Rocket 9M313 1 GLA -1	50
9.	Launcher gp51g 1GLA - L	5

We certify that we are the end-user and importer of the goods/technologies referred to in item 1 - 9. Except as authorized by prior written approval of the export control authority of Ukraine, we undertake not to: (1) re-export, (2) sell, (3) lend to any other person or otherwise dispose of the goods/technologies referred to in this document outside the country of end user. This refers also to spare parts, specialist tools, documentation, technical support and operating manuals necessary for the after-sales support.

A relevant Delivery Verification Certificate will be present to the Supplier for each individual shipment, within 10 days from the date of its receipt.

Khalifh M. Ghwel,  
First Deputy Prime Minister  
and acting Minister of Defense

For the End User  
Signature, stamp



CASE NO. CR 15-0704 (A)-SJO  
UNITED STATES OF AMERICA

VS. GHANEM

PLAINTIFF'S EXHIBIT 355

DATE \_\_\_\_\_ IDEN.

DATE \_\_\_\_\_ EVID.

BY \_\_\_\_\_  
DEPUTY CLERK

AO 386

التاريخ  
Date  
2015 / 01 / 07 الموافق  
الرقم الإشاري: ود /  
Ref. Number  
0054/57



رئاسة مجلس الوزراء  
وزارة الدفاع  
ديوان الوزارة

## Ministry of Defense END USER CERTIFICATE

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**Khalifah M. Ghwel,**  
**First Deputy Prime Minister**  
**and acting Minister of Defense**

For the End User  
Signature, stamp

